The Lincoln Electric Company
22801 St. Clair Avenue
Cleveland, Ohio 44117-1199

CERTIFICATE OF CONFORMANCE

Electrode: **Lincolnweld® L-61®**
Electrode Size **3/32" (2.4 mm)**
Flux: **Lincolnweld® 960®**
Specification: **AWS D1.8:2021**
Date: **February 27, 2025**

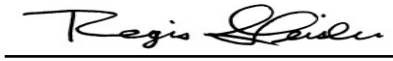
This is to certify that the above listed flux was manufactured to meet the Class F2 requirement of AWS A5.01, and the above listed electrode was manufactured to meet the Class S4 requirement of AWS A5.01, as required by clause 6.3.1.2 of AWS D1.8:2021.

It was manufactured and supplied according to a Quality System Program that meets the requirements of ISO9001 among others as documented on The Lincoln Electric web page (<http://www.lincolnelectric.com/en-us/company/Pages/certifications.aspx>).

Operating Settings	High Heat Input Requirements	Low Heat Input Requirements	High Heat Input Results	Low Heat Input Results
Electrode Lot			19331248	19331248
Flux Lot			19322773	19322773
Base Material			ASTM A572 steel (Grade 50)	ASTM A36 steel
Current Type/Polarity			DC+, Twin Arc	DC+, Twin Arc
Plate Thickness, mm (in)	(0.75 - 1)	(0.75 - 1)	25 (1.00)	25 (1.00)
Nominal Voltage, V			29.5	28.0
Wire Feed Speed, cm/min (in/min)			249 (98)	142 (56)
Nominal Current, A			750	500
Average Heat Input, kJ/mm (kJ/in)	Not Specified	Not Specified	2.2 (55.3)	1.3 (32.3)
Contact Tip to Work Distance, mm (in)			32 (1.25)	25 (1.00)
Travel Speed, cm/min (in/min)			61 (24.0)	66 (26.0)
Pass/Layers			14/7	28/13
Preheat Temperature, °C (°F)	(250 min.)	(120 max.)	120 (250)	20 (65)
Interpass Temperature, °C (°F)	(450 min.)	(250 max.)	230 (450)	120 (250)
Postweld Heat Treatment	As-welded	As-welded	As-welded	As-welded
Weld Position			1G	1G
Mechanical properties of weld deposits				
Tensile Strength, MPa (ksi)	(70 min.)	(70 min.)	520 (75)	560 (81)
Yield Strength, 0.2% Offset, MPa (ksi)	(58 min.)	(58 min.)	400 (58)	470 (68)
Elongation %	22 min.	22 min.	31	27
Average Impact Energy Joules @ -18 °C (ft-lbs @ 0 °F)	(40 min.)	(40 min.)	93 (69) 81,96,103 (60,71,76)	121 (90) 116,122,126 (86,90,93)

1. The Charpy V-notch impact values reported at -18 °C (0 °F) are required when the Lowest Anticipated Service Temperature (LAST) is -29 °C (-20 °F).
2. Lot testing exemption as defined in AWS D1.8/D1.8M: 6.3.3 by testing a minimum of 3 lots for approval has been completed. For further questions please contact customer service. https://www.lincolnelectric.com/en/Ask-the-Experts/Contact-Us
3. Strength values in SI units are reported to the nearest 10 MPa converted from actual data. Preheat and interpass temperature values in SI units are reported to the nearest 5 degrees.

February 27, 2025
Daniel Gaul, Certification Supervisor — Date



February 28, 2025
Regis Geisler, Manager, Consumable Compliance — Date